



A.D. 1872, 11th SEPTEMBER. N° 2687.

SPECIFICATION

OF

BRIDGE BARON STANDEN.

—
COLLECTING AND
TREATING EXCREMENTITIOUS MATTERS.
—

LONDON:

PRINTED BY GEORGE E. TYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

1873.



A.D. 1872, 11th SEPTEMBER. N° 2687.

Collecting and Treating Excrementitious Matters.

LETTERS PATENT to Bridge Baron Standen, of No. 9, Langdon Terrace, Blackheath, in the County of Kent, for the Invention of "IMPROVEMENTS IN COLLECTING AND TREATING HUMAN EXCREMENT, BOTH SOLID AND LIQUID, AND IN THE TREATMENT OF OTHER ANIMAL URINE, ALSO IN THE MEANS OR APPARATUS EMPLOYED THEREIN."

Sealed the 7th March 1873, and dated the 11th September 1872.

PROVISIONAL SPECIFICATION left by the said Bridge Baron Standen at the Office of the Commissioners of Patents, with his Petition, on the 11th September 1872.

I, BRIDGE BARON STANDEN, of No. 9, Langdon Terrace, Blackheath, 5 in the County of Kent, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN COLLECTING AND TREATING HUMAN EXCREMENT, BOTH SOLID AND LIQUID, AND IN THE TREATMENT OF OTHER ANIMAL URINE, ALSO IN THE MEANS OR APPARATUS EMPLOYED THEREIN," to be as follows:—

In carrying out my improvements I form the privies or closets or 10 such like places with the seat thereof supported on centres or axes at the sides of it, so that in use the front edge of the seat may have a tendency

Standen's Improvements in Collecting, &c. Excrementitious Matters.

to be slightly depressed, and the back of it raised. Beneath and surrounding the under side of the opening in the seat are applied four plates, two of which the front and back ones are stationary and inclined backwards, whilst the two side ones are suspended on axes from the upper part; and these axes are by cranks or such like means operated upon by 5 the seat, so that when not in use the lower edges of these side plates incline towards and rest against each other, and they then with the other plates close the lower part of the chamber from view; but by the depression of the front part of the seat in use these side plates open for a free passage, and then the ejectments drop into a receptacle placed in 10 position to receive them below.

The relative position of the moveable and stationary plates may be varied. The receptacles are moveable so that when one is filled another may take its place. The matters collected from such like places are then placed in a cistern or tank through a separator formed of sieve or 15 reticulate work to act as a screen to separate paper and other foreign matters of bulk, and the matters collected in the cistern or tank are then acted upon by sulphuric acid until by the use of ordinary tests they are found to be in a neutral state. The product obtained is in a liquid form passed into a chamber heated, and I employ steam in pipes for the 20 purpose so as to evaporate the water therefrom, and thereby separate it from the more solid parts. The water vaporized is then condensed, and in some cases filtered by being passed through charcoal.

The more solid portion is combined with ashes prepared by being ground and mixed with sulphuric or other acid for manure. 25

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Bridge Baron Standen in the Great Seal Patent Office on the 10th March 1873.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, BRIDGE BARON STANDEN, of No. 9, Langdon Terrace, Blackheath, in the County 30 of Kent, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Eleventh day of September, in the year of our Lord One thousand eight hundred and seventy-two, in the

Standen's Improvements in Collecting, &c. Excrementitious Matters.

thirty-sixth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Bridge Baron Standen, Her special license that I, the said Bridge Baron Standen, my executors, administrators, and assigns, or such others as I, the said Bridge Baron Standen, 5 my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for 10 "IMPROVEMENTS IN COLLECTING AND TREATING HUMAN EXCREMENT, BOTH SOLID AND LIQUID, AND IN THE TREATMENT OF OTHER ANIMAL URINE, ALSO IN THE MEANS OR APPARATUS EMPLOYED THEREIN," upon the condition (amongst others) that I, the said Bridge Baron Standen, my executors or administrators, by an instrument in writing under my, or their, or one of 15 their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

20 NOW KNOW YE, that I, the said Bridge Baron Standen, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

The Invention relates, first, to means or apparatus for collecting 25 human excrement, solid and liquid; and secondly, the Invention relates to the treatment of such excrement and other animal urine.

In carrying out the first part of my improvements I form the privies or closets or such like places with the seat thereof supported on centres or axes at the sides of it so that in use the front edge of the seat may 30 have a tendency to be slightly depressed and the back of it raised. Beneath and surrounding the under side of the opening in the seat are applied four plates, two of which the front and back ones are stationary and inclined backwards, whilst the two side ones are suspended on axes from the upper part; and these axes are by cranks or such like means 35 operated upon by the seat, so that when not in use the lower edges of these side plates incline towards and rest against each other, and they then with the other plates close the lower part of the chamber from

Standen's Improvements in Collecting, &c. Excrementitious Matters.

view, but by the depression of the front part of the seat in use these side plates open for a free passage, and then the ejectments drop into a receptacle placed in position to receive them below.

But that the Invention may be fully understood, I will proceed to describe means pursued by me in carrying the same into effect. 5

DESCRIPTION OF THE DRAWINGS.

Figure 1 shews a plan view ; Figure 2 an under side view ; Figure 3 a sectional front view ; and Figure 4 a transverse section of a privy or closet arranged according to the first head of the Invention with the parts of it in the position they would assume when not used by a person 10 sitting on the seat. Figure 5 shews a plan view ; Figure 6 an under side view ; Figure 7 a sectional front view ; and Figure 8 a cross section, shewing the position the parts assume when in use by a person sitting on the seat.

a is the seat, and b the ordinary hole therein. This seat is formed to 15 rock on centres or axes c, c , and there are weights applied to the back part thereof with a tendency to keep that part depressed and the front edge thereof raised, or the like effect may be obtained by spring pressure. d, e, f , and g , are the four plates applied to the under side of the seat. The plates d and e are fixed stationary to the seat, and the plates f 20 and g are affixed to rods forming axes f^1 and g^1 , suspended so as to turn freely in necks applied to the under side of the seat to enable these plates f and g to turn freely between the plates d and e . The rods or axes f^1 and g^1 are bent at one of their ends into a crank form as at f^2, g^2 , and the ends f^3, g^3 , thereof pass into eyes applied to the stationary parts 25 surrounding the seat.

When the front part of the seat a is raised by not being sat upon the tendency is to cause the lower ends f^4, g^4 , of the plates f and g to bear against each other at their lower edges as represented by Figures 1, 2, 3, and 4. On the contrary when the front edge of the seat a is depressed 30 in use by being sat upon the action of the cranks f^2, g^2 , is to cause the plates f and g to separate and allow of the free passage of the ejectments to a receptacle which may be wheeled or otherwise placed in the position of the dotted lines h .

The relative position of the moveable and stationary plates may be 35 varied, and the receptacles are moveable so that when one is filled

Standen's Improvements in Collecting, &c. Excrementitious Matters.

another may take its place. The matters collected from such like places are then according to the second part of my Invention placed in a cistern or tank through a separator formed of sieve or reticulate work adapted to act as a screen to separate paper and other foreign matters of
5 bulk from the other matters, and the matters collected in the cistern or tank are then acted upon by sulphuric acid until by the use of ordinary tests they are found to be in a neutral state. The product thus obtained is in a liquid form passed into a heated chamber, and I employ steam in pipes for the required heating in order to evaporate the water from the
10 other matters, and thereby separate such water from the more solid parts. The water vaporized is then condensed, and in some cases filtered by being passed through charcoal. The more solid portion is combined with ashes prepared by being ground and mixed with sulphuric acid or other acid for manure.

15 Having thus described my Invention, and means which I adopt in carrying the same into effect, I would have it understood that what I claim is,—

First. The adaptation or combination of parts of privies or closets or such like places for collecting human excrement, substantially as
20 described.

Secondly. I claim the treating of human excrement both solid and liquid, and the treating of other animal urine in manner substantially as described.

25 In witness whereof, I, the said Bridge Baron Standen, have hereunto set my hand and seal, this Seventh day of March, in the year of our Lord One thousand eight hundred and seventy-three.

BRIDGE B. STANDEN. (L.S.)

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1873.

FIG. 1.

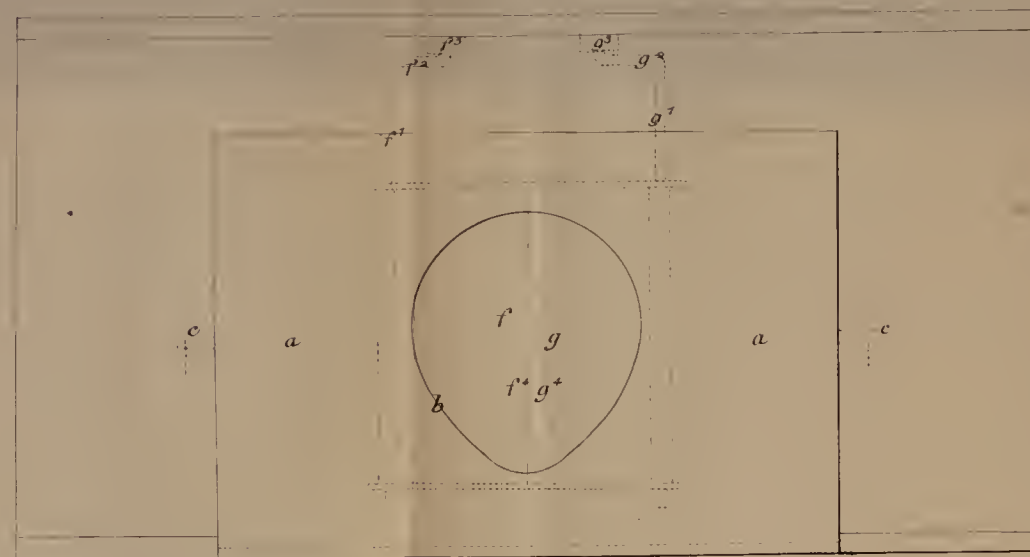


FIG. 2.

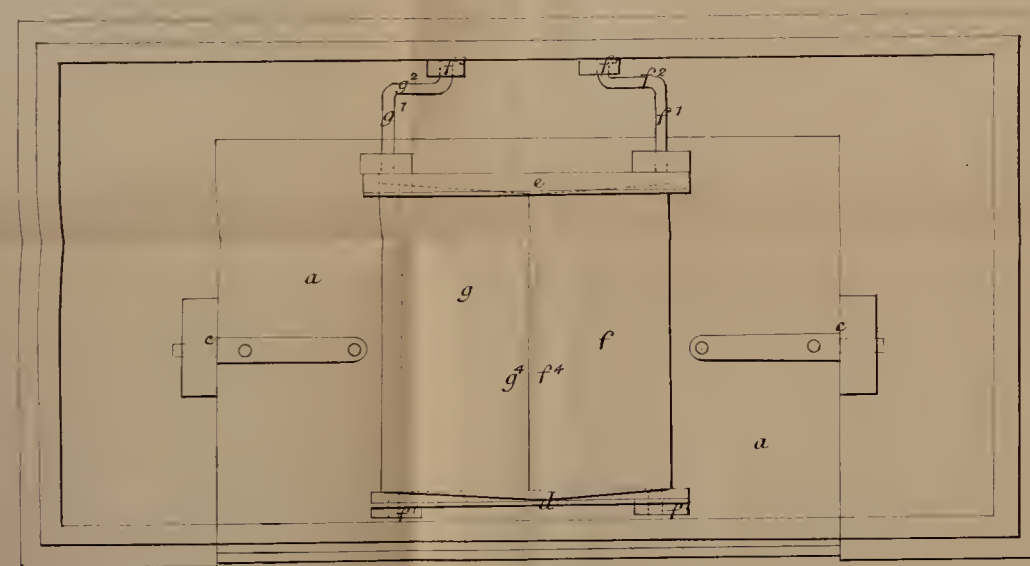


FIG. 3.

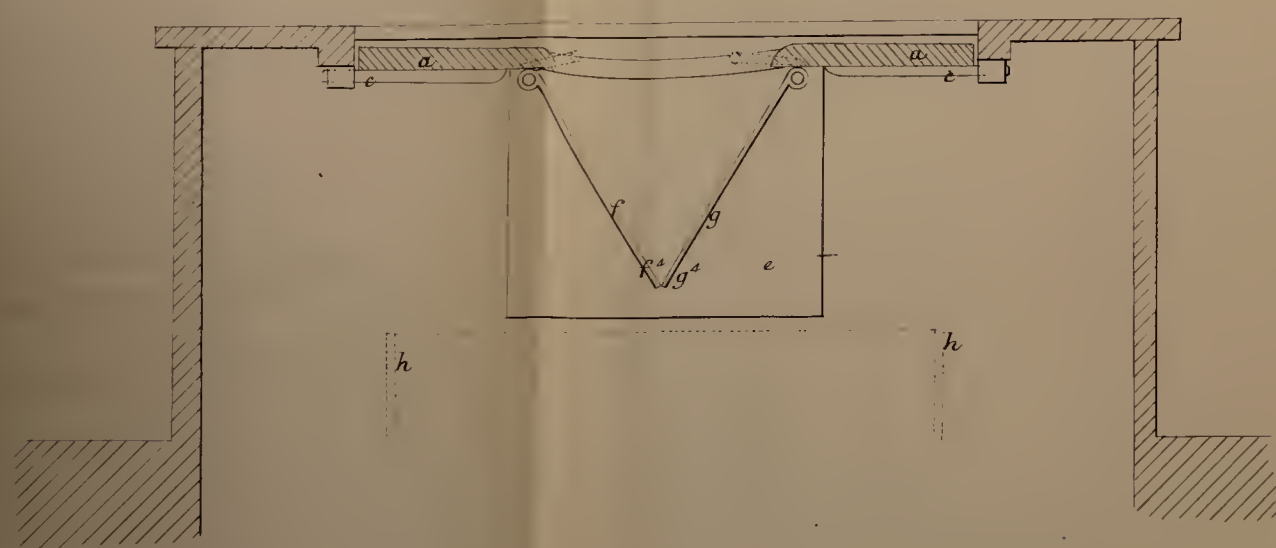


FIG. 5.

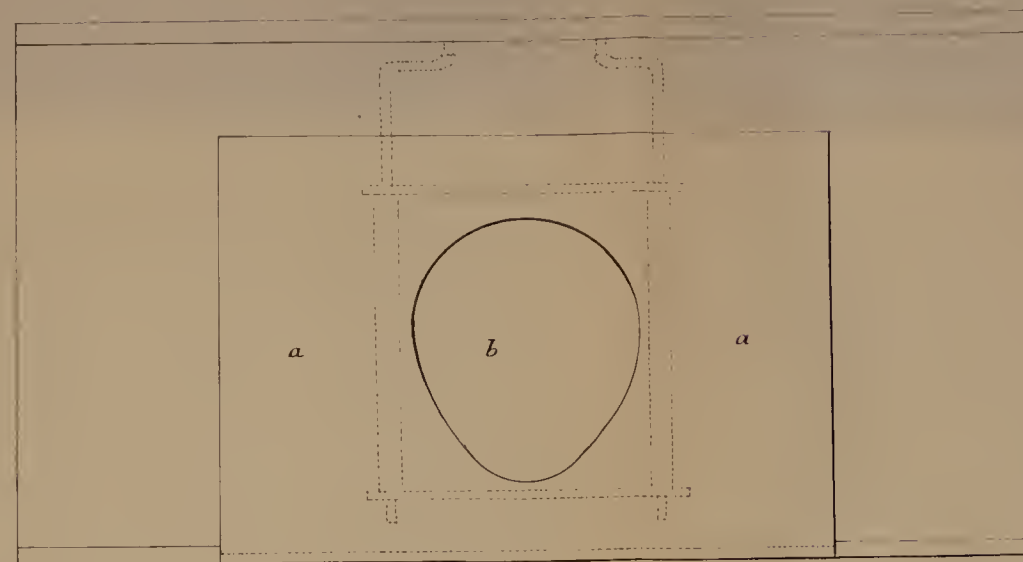


FIG. 6.

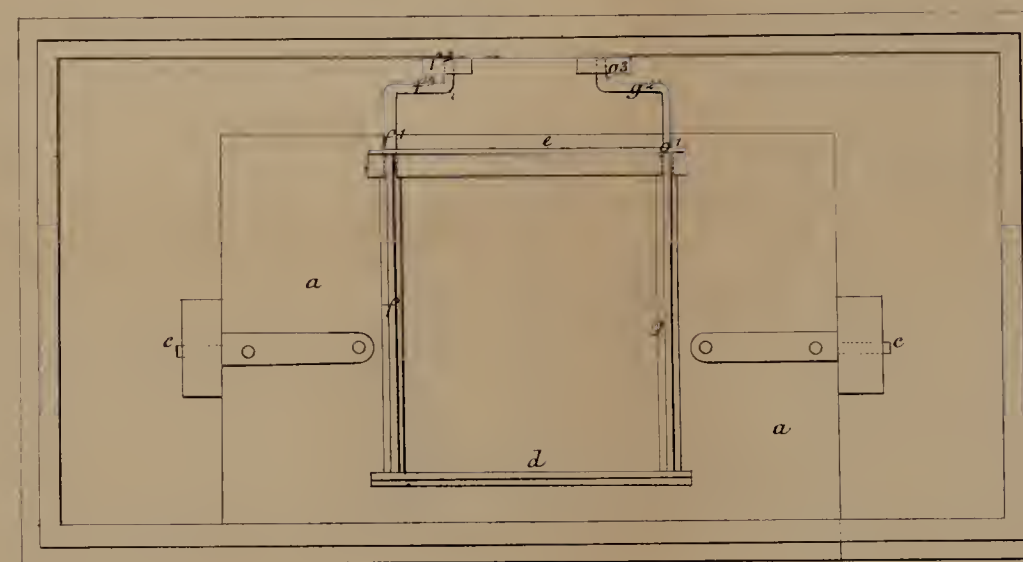


FIG. 7.

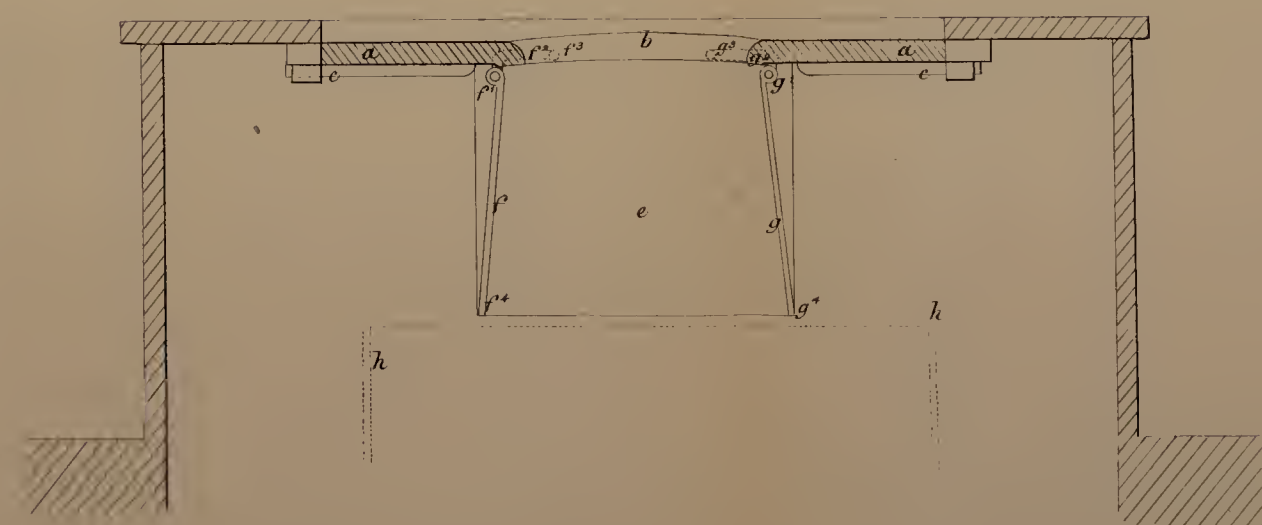


FIG. 4.

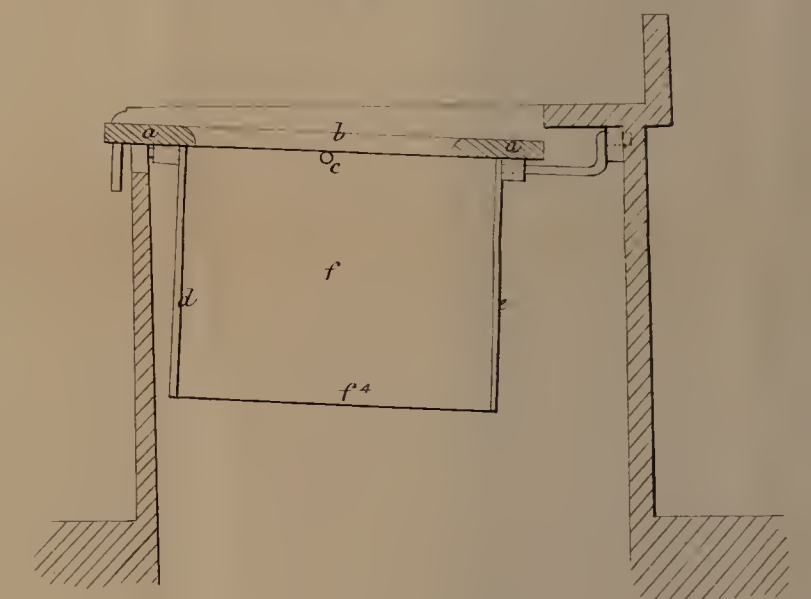


FIG. 8.

